# § 192.715 Transmission lines: Permanent field repair of welds.

Each weld that is unacceptable under §192.241(c) must be repaired as follows:

- (a) If it is feasible to take the segment of transmission line out of service, the weld must be repaired in accordance with the applicable requirements of § 192.245.
- (b) A weld may be repaired in accordance with §192.245 while the segment of transmission line is in service if:
  - (1) The weld is not leaking;
- (2) The pressure in the segment is reduced so that it does not produce a stress that is more than 20 percent of the SMYS of the pipe; and
- (3) Grinding of the defective area can be limited so that at least ½-inch (3.2 millimeters) thickness in the pipe weld remains.
- (c) A defective weld which cannot be repaired in accordance with paragraph (a) or (b) of this section must be repaired by installing a full encirclement welded split sleeve of appropriate design.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192–85, 63 FR 37504, July 13, 1998]

#### § 192.717 Transmission lines: Permanent field repair of leaks.

Each permanent field repair of a leak on a transmission line must be made by—

- (a) Removing the leak by cutting out and replacing a cylindrical piece of pipe; or
- (b) Repairing the leak by one of the following methods:
- (1) Install a full encirclement welded split sleeve of appropriate design, unless the transmission line is joined by mechanical couplings and operates at less than 40 percent of SMYS.
- (2) If the leak is due to a corrosion pit, install a properly designed bolt-on-leak clamp.
- (3) If the leak is due to a corrosion pit and on pipe of not more than 40,000 psi (267 Mpa) SMYS, fillet weld over the pitted area a steel plate patch with rounded corners, of the same or greater thickness than the pipe, and not more than one-half of the diameter of the pipe in size.
- (4) If the leak is on a submerged offshore pipeline or submerged pipeline in inland navigable waters, mechanically

apply a full encirclement split sleeve of appropriate design.

(5) Apply a method that reliable engineering tests and analyses show can permanently restore the serviceability of the pipe.

[Amdt. 192-88, 64 FR 69665, Dec. 14, 1999]

# § 192.719 Transmission lines: Testing of repairs.

- (a) Testing of replacement pipe. If a segment of transmission line is repaired by cutting out the damaged portion of the pipe as a cylinder, the replacement pipe must be tested to the pressure required for a new line installed in the same location. This test may be made on the pipe before it is installed.
- (b) Testing of repairs made by welding. Each repair made by welding in accordance with §§ 192.713, 192.715, and 192.717 must be examined in accordance with § 192.241.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192–54, 51 FR 41635, Nov. 18, 1986]

# § 192.721 Distribution systems: Patrolling.

- (a) The frequency of patrolling mains must be determined by the severity of the conditions which could cause failure or leakage, and the consequent hazards to public safety.
- (b) Mains in places or on structures where anticipated physical movement or external loading could cause failure or leakage must be patrolled—
- (1) In business districts, at intervals not exceeding 4½ months, but at least four times each calendar year; and
- (2) Outside business districts, at intervals not exceeding 7½ months, but at least twice each calendar year.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192–43, 47 FR 46851, Oct. 21, 1982; Amdt. 192–78, 61 FR 28786, June 6, 1996]

# § 192.723 Distribution systems: Leakage surveys.

- (a) Each operator of a distribution system shall conduct periodic leakage surveys in accordance with this section.
- (b) The type and scope of the leakage control program must be determined by the nature of the operations and the